

FINAL

Defense Environmental Restoration Program for Formerly Used Defense Sites Ordnance and Explosives

ARCHIVES SEARCH REPORT FINDINGS

FIVE POINTS OUTLYING FIELD

Tarrant County, Texas

Project Number - KO6TX002801

FEBRUARY 2002

Prepared by
US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

ORDNANCE AND EXPLOSIVES

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1.0 INTRODUCTION

1.1 Authority

In 1986, Congress established the Defense Environmental Restoration Program (DERP) at 10 U.S.C. Sec. 2701, *et seq*. This program directed the Secretary of Defense to "carry out a program of environmental restoration at facilities under the jurisdiction of the Secretary."

In March 1990, the Environmental Protection Agency (EPA) issued a revised National Contingency Plan. Under 40 C.F.R. 300.120, EPA designated DoD to be the removal response authority for incidents involving DoD military weapons and munitions under the jurisdiction, custody and control of DoD.

Since the beginning of this program, the U.S. Army Corps of Engineers has been the agency responsible for environmental restoration at Formerly Used Defense Sites (FUDS). Since 1990, the U.S. Army Engineering and Support Center, Huntsville, has been the Center of Expertise (CX) and Design Center for Ordnance and Explosives.

1.2 Subject

The 162.06-acre site known as the former Five Points Outlying Field (Five Points OLF) is located at the corner of Harris Road and Matlock Road, Arlington, Tarrant County, Texas. A 35-acre portion of the former Five Points OLF was developed in the 1980s as a mobile home park under the name of Twin Parks Estates. Some references in earlier documents may refer to Twin Parks Estates, but may mean by that reference the entire 162.06-acre tract formerly used by DoD, rather than only the 35-acre tract that is legally developed under the name of Twin Parks Estates. Use of the Twin Parks Estates name in this document, however, should be construed to be limited to the 35-acre mobile home park development. The remainder of the original 162.06-acre tract used by DoD is currently being developed as a new home subdivision known as Southridge or South Ridge Hills.

1.3 Purpose

The Archives Search Report (ASR) compiles information obtained through historical research at various archives and records holding facilities, interviews with local individuals, and a team inspection of the site. The search directs efforts towards determining possible use or disposal of Ordnance & Explosives (OE) and Chemical Warfare Materiel (CWM) on the site. The research places particular emphasis on establishing the types, quantities, and area of disposal. This process obtains information for use in developing recommendations for further action at Five Points OLF.

1.4 Scope

The entire area of the former Five Points OLF, approximately 162.06 acres, was considered in assessing the potential for ordnance and explosives or for chemical warfare material contamination.

2.0 PREVIOUS INVESTIGATIONS

2.1 Corps of Engineers Documents

An Inventory Project Report (INPR) was completed in October 1996, by the U.S. Army Corps of Engineers, Fort Worth District, to establish this site as a Formerly Used Defense Site (FUDS) under the Defense Environmental Restoration Program (DERP). A copy of the INPR is included in Appendix D. The INPR refers to the former Five Points Outlying Field property as the "Boswell and Morris Properties", who were the owners of the land at the time the Corps prepared the INPR.

2.2 Other Reports

No other engineering or environmental study reports were found for this site.

3.0 SITE DESCRIPTION

3.1 Land Usage

3.1.1 Location

The 162.06-acre site formerly used by the DoD and known as Five Points Outlying Field (Five Points OLF) is located at the corner of Harris Road and Matlock Road, Arlington, Tarrant County, Texas.

3.1.2 Past use

At unidentified dates, the Navy declared all 162.06 acres excess and transferred them to the General Services Administration (GSA) for disposal. The GSA conveyed all 162.06 acres of the site to Gordon and Pope Supply Company on 19 July 1956.

It is not known when the military ceased use of the site. The site was never subject to other than DoD control during the period of DoD interest. There is nothing in the records to indicate that there were any historically significant past ownerships, other than DoD's, with respect to possible OE contamination.

3.1.3 Present Use

A portion of the site (approximately 35 acres) consists of the Twin Parks Estates mobile home park. The remainder of the 162.06 acres of the Five Points OLF site is currently being developed as a new housing subdivision called Southridge/South Ridge Hills. Many of the homes have been sold to individual owners while others are under construction.

3.2 Climatic Data

The nearest source of long-record climatological data for this site is the Dallas-Fort Worth National Weather Service (NWS) office. This office is located approximately 15 miles north-northeast of Five Points OLF. Climatological data recorded at this office during the period 1948-1995 is given in TABLE 3.1. The Dallas-Fort Worth climate is humid subtropical with hot summers. It is also continental, characterized by a wide annual temperature range. Precipitation also varies considerably, ranging from less than 20 inches to more than 50 inches annually.

Throughout the year, rainfall occurs more frequently during the night. Usually, periods of rainy weather last for only a day or two, followed by several days with fair skies. A large part of the annual precipitation results from thunderstorm activity, with occasional heavy rainfall over brief periods of time. Thunderstorms occur throughout the year, but are most frequent in the spring. During the period 1948-

1995 at the Dallas-Fort Worth NWS office, the daily precipitation extremes include a minimum of 1.58 inches (in 1960) and a maximum of 4.85 inches (in 1959). During the same period at this office, the maximum 24-hour rainfall recorded is 4.71 inches (in May 1965). Hail falls on about two or three days a year, ordinarily with only slight and scattered damage. Windstorms occurring during thunderstorm activity are sometimes destructive. Wind gusts for the area have reached a maximum of 72 knots, whereas the average maximum wind speed is 61 knots.

The highest temperatures of summer are associated with fair skies, westerly winds and low humidities. Characteristically, hot spells in summer are broken into three-to-five day periods by thunderstorm activity. There are only a few nights each summer when the low temperature exceeds 80 degrees Fahrenheit. Summer daytime temperatures frequently exceed 100 degrees Fahrenheit. Winters are mild, but northers occur about three times each month and often are accompanied by sudden drops in temperature. Periods of extreme cold that occasionally occur are short-lived, so that even in January, mild weather occurs frequently. Snowfall is rare, with an average annual precipitation of 18 inches occurring mainly during the months of January and February. The average length of the warm season (freeze-free period) in the Dallas-Fort Worth Metroplex is about 249 days. The average last occurrence of 32 degrees Fahrenheit or below is in mid-March and the average first occurrence of 32 degrees Fahrenheit or below is in late November. During the period 1948-1995 at the Dallas-Fort Worth NWS office, the daily temperature extremes include a minimum of -1 degree Fahrenheit (in December 1989) and a maximum of 113 degrees Fahrenheit (in June 1980).

TABLE 3-1

CLIMATOLOGICAL DATA RECORDED AT THE DALLAS-FT. WORTH, TEXAS, NATIONAL WEATHER SERVICE OFFICE

Month	Tempe	rature	Precipitati on	Wi	nd
	Average Minimum (?F)	Average Maximum (?F)	Average (Inches)	Average Speed (knots)	Average Direction
January	34	54	1.9	11	s
February	38	60	2.2	11	s
March	45	68	2.6	13	s
April	55	76	3.8	13	s
May	63	83	5.0	12	s
June	71	92	2.9	11	s
July	75	96	2.2	10	s
August	74	96	2.0	9	s
September	67	88	3.0	10	s
October	56	79	3.5	10	s
November	45	66	2.2	11	s
December	37	58	1.9	10	s
Average	55	76	33.3	11	s

Source: International Station Meteorological Climate Summary, September 1996. Jointly produced by: Fleet Numerical Meteorology and Oceanography Detachment, National Climatic Data Center, and USAFETAC OL-A.

3.3 Geology and Soils

3.3.1 Geology and Physiology

The Five Points OLF site is located in the Osage Plains section of the Central Lowland province. Rocks of this section range from Cretaceous to Recent. The oldest strata are exposed in the western part of

Tarrant County. Younger bedrock units are exposed in sequence toward the east. Alluvium and terrace deposits overlap the bedrock along streams and rivers.

The outstanding geologic event in the region was the encroachment of the Comanchean Sea. This early Cretaceous sea moved slowly from the Gulf of Mexico to cover all of Texas. It extended northward to cover the Arbuckle Uplift (in Oklahoma) and then receded. After a period of exposure and erosion, sediments from this period were covered by the less extensive sea of the Gulfian Epoch.

Comanchean series rocks of the Cretaceous System are divided into three major divisions: the Trinity, the Fredericksburg, and the Washita Group. The Cretaceous System forms a southeastward-thickening wedge extending across the area into a structural feature known as the East Texas basin. Regional dip is east and southeast at rates of about 15 to 40 feet/mile (Nordstrom 1982).

Along the contacts between geologic formations, a mixing of sediments by erosion has occurred. It is most evident where the formations have widely different characteristics.

In the area between formations of the Fredericksburg and Trinity Groups, strongly calcareous materials of the higher lying Fredericksburg Group have moved downslope so as to cover the noncalcareous Trinity Group. Further movement downslope has mixed these sediments into material that differs from that in the original formations. In these areas of mixed parent materials, unlike soils occur in close association. Small areas of calcareous soils with grass cover occur in intricate patterns with acid soils and oak forest cover (Putnam et al. 1979).

3.3.2 Soils

The soils of the Five Points OLF site are a combination of clays and silty clays. The soils range from very shallow to deep in very short distances. The slope ranges from level to 30%. Since the site covers a large area and the soil series are relatively small and jumbled, there are a number of different soil types present in the site. For all the soils present, the risk of corrosion to uncoated steel is high and to concrete is low.

The shallow soils have a surface layer that can range from 5 to 12 inches deep. It consists of grayish-brown gravelly clay. Underlying this layer is platy or coarsely fractured limestone. These soils are well-drained. The available water capacity is very low, permeability is moderately slow, and runoff is medium to rapid depending on the slope. The hazard of erosion due to water is slight to moderate.

The deep soils have profiles that differ greatly within small areas. The surface layer is generally about 12 inches thick. It is composed of dark grayish-brown stony clay or clay. The subsurface layer, to a depth of 25 inches, is very dark gray clay. The subsoil, to a depth of 40 inches, is dark gray, light olive brown or yellowish-brown clay and silty clay. The stratum and substratum, to

70 inches, is composed of brownish yellow silty clay, or grayish-brown clay that may be mottled with olive yellow in some small areas. The deep soils are well-drained. The available water capacity is medium to high, permeability is very slow, surface runoff is medium, and the hazard of water erosion is moderate.

The large area within the site that has an easily recognizable soil profile is the airport in the southern section. The surface layer is dark grayish-brown clay and dark gray clay about 20 inches thick. The subsoil is dark grayish-brown clay to 63 inches. The stratum is olive gray or grayish-brown clay to 70 inches. These soils are poorly drained, the available water capacity is high, permeability is very slow, and runoff is slow. The hazard of soil erosion due to water is severe (Putnam et al. 1979).

There is little or no potential for frost development in the soil at this site.

3.4 Hydrology

3.4.1 Ground Water

The Trinity Group of Cretaceous age is the largest and most prolific aquifer in the study area. The aquifer consists of the Antlers, Paluxy, and Twin Mountains Formations. The Antlers is a coalescence of the Paluxy and Twin Mountains. The Trinity Group aquifer ranges in thickness from 100 feet in the outcrop area to about 1200 feet near the downdip limit of fresh to slightly saline water. Artesian storage coefficients range from 0.0001 to 0.00025 and specific yields range from 15 to 25 percent in the outcrop (Nordstrom 1982).

3.4.2 Surface Water

There are no major rivers or streams at this site. Runoff from this location drains to the southeast portion of the site into an intermittent section of Bowman Branch. This branch flows easterly, becoming perennial, and eventually empties into Walnut Creek approximately 3.5 miles east-southeast of the site. From this point, the flow heads to the east-northeast for approximately three miles until draining into Mountain Creek, 1800 feet downstream of the John Penn Branch confluence. The flow then travels approximately five miles to the north-northeast before draining into Mountain Creek Lake.

REFERENCES FOR GEOLOGY AND SOILS

Nordstrom, Phillip L.

1982

Occurrence, Availability, and Chemical Quality of Ground Water in the Cretaceous Aquifers of North-Central Texas. Texas Department of Water Resources, Report 269.

Putnam, Lee A., Cail, Charles R., Cochran, Rex A., Guckian, William J., Lovelace, Lyle C., and Wagner, Billy J.

1979

Soil Survey of Cooke County, Texas. U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Texas Agricultural Experiment Station.

3.5 Ecology

The information on the endangered and threatened species for this site has been provided by the U.S. Fish and Wildlife Service (USFWS) and the Texas Parks and Wildlife Department.

The USFWS reported that the following Federally-listed species occur in Tarrant County, Texas: whooping crane (Grus americana), endangered; bald eagle (Haliaeetus leucocephalus), threatened; least tern (Sterna antillarum), endangered.

The Texas Parks and Wildlife Department provided the following inventory of state-listed species that are known to occur in Tarrant County; no additional information on the occurrence of rare or endangered species or natural communities is known at this time. This does not mean that other state or Federally-listed species may not be present within the areas of interest. An onsite inspection by appropriate state and Federal personnel may be necessary to verify the presence, absence, or location of listed species, or natural communities if remedial action is recommended as part of the final ASR.

3.6 Demographics

3.6.1 Center of Activity

Five Points OLF is located in Tarrant County, Texas, approximately six miles south of the city of Arlington.

3.6.2 Population Density

City/County	Area (Sq. Mi.)	Population	Population Density (Per Sq. Mi.)
Arlington	93.0	261,721	2,814.2

Five Points Outlying Field Tarrant County, Texas Archives Search Report - Findings

Tarrant County	863.5	1,170,103	1,355.1

3.6.3 Types of Business

Based on a total of establishments in Tarrant County, the breakdown of industry is as follows:

-Manufacturing 6.5%

-Construction	8.3%
-Services	37.3%
-Trade and Finance	40.7%
-Other	7.2%

Of the people in the county employed by businesses, about 34.5 percent are employed by trade and finance businesses. Also prominent are services businesses at about 33.0 percent, manufacturing at 18.1 percent, and agriculture at 0.5 percent. Foregoing percentages are at mid-March 1995.

3.6.4 Types of Housing

Housing in Arlington is composed of both single family and multi-family dwellings. The median value of the 52,182 specified owner-occupied housing units in Arlington is \$82,800.

3.6.5 New Development in the Area

There is much new commercial and residential development in Arlington.

3.6.6 Typical Cross Sections of the Population

The following is a cross section of the population in Arlington:

-White		82.6%
-Black		8.4%
-American Indian/Eskimo/A	leut 0.5%	
-Asian/Pacific Islander	3.9%	

-Other 4.6%

The percent of the total population that is of Hispanic origin is 8.9 percent. The part of the population that is under the age of 18 is 27.1 percent and the part over the age of 65 is 5.0 percent. The median age is 28.1 years.

INFORMATION SOURCES

U.S. Census reports as listed below:

-1990 Census of Population and Housing, Arlington, Texas

-1994 County and C	ity Data Book, A	rea and Population.	Tarrant Coun	tv. Texas

⁻¹⁹⁹⁴ County and City Data Book, Area and Population, -1995 County Business Patterns, Tarrant County, Texas

4.0 SITE HISTORY

4.1 Historical Site Summary

General and OE History

The former Five Points Outlying Field (Five Points OLF) is situated at the corner of Harris and Matlock Roads, Arlington, Tarrant County, Texas, at 32?37'26" latitude and 97? 07' 25" longitude. The U.S. Government acquired 162.06 fee acres for this site in 1940. Personnel from the Dallas Naval Air Station (NAS) used this property first as a practice landing field, then as a practice bombing range. Improvements constructed at the site included a practice landing field, a target bulls-eye consisting of two concentric rings, and a boundary fence.

Ordnance known used at Five Points OLF includes the MK 23-MOD-1 miniature Navy practice bombs, M38A2 Practice Bombs, and an unknown version of the M47 series Chemical Bomb (9800 TSU-CE, 1954).

A 7 October 1954 Report of Clearance, signed by Major Dallas H. Lynch, states that all duds found on the range were recovered from the range and consisted of 75, M-47 Chemical Bombs, 27, MK 23 Model 1 Navy bombs, & 23, M38 practice bombs. Of these, 22 contained explosives and were destroyed. The 25.6acre impact area was recommended against sub-surface use (9800 TSU-CE, 1954).

A 1955 General Services Administration (GSA) Letter requested Major Lynch to provide a map with the dimensions of the restricted area with a sufficient degree of accuracy to permit it to be described by metes and bounds in their (GSA) specifications of sale and conveyance instruments (GSA, 1955).

A 26 January 1956 Certificate of Clearance states that the 17.5 acre impact area is recommended for any above-surface use to which the land is suited. The reduced acreage of the impact area was due to the accuracy requested by GSA. In addition, Tech Escort personnel recommended the remainder of the field for any use to which the land is suited. This 1956 Certificate of Clearance supersedes the Report of Clearance dated 7 October 1954 (9800 TSU-CE, 1956).

The Navy declared all 162.06 acres of the Five Points OLF site excess (date undetermined) and transferred the property to the GSA for disposal. The GSA conveyed all 162.06 fee acres of the former Five Points OLF to Gordon and Pope Supply Company on 19 July 1956.

Post DoD Ownership Activities Involving Ordnance

Construction of the Twin Parks Estates mobile home park commenced on a thirty-five acre portion of

the former Five Points OLF on 1 September 1983. On 16 November 1983, construction was halted due to the finding of a subsurface bomb by a city inspection (Twin Park Estates 1984). The partnership hired Jet Research Center to clear the mobile home park site of ordnance. Jet Research Center removed approximately three thousand bombs from the thirty-five acres. Ordnance was found as deep as six feet, which may indicate that ordnance found during previous sweeps was buried in place. The 47th Ordnance Detachment at Fort Hood took possession of the ordnance recovered by Jet Research Center for proper disposal (INPR, 1996).

It has been reported that children have in fact found MK 23, 3-lb practice bombs on the property and that they also have removed the black powder to light it in order to watch it burn. During a visit by the Huntsville Engineering and Support Center (CEHNC) on 17 February 1998, a landowner revealed that these incidents with the children took place throughout the 1940s (INPR, 1996; USACE 1998). A Fort Worth District Corps employee stated that he also found unexpended MK 23 bombs on the Five Points OLF site as late as the 1970s (Osborn 2002).

Personnel from the Huntsville CEHNC visited the area during this time to address some concern that pertained to the remaining 127 acres of the former practice bombing range. The acreage at that time was undeveloped, but contained Mesquite trees, tall weeds, and grass. The CEHNC conducted a visual and magnetometer survey of the area without any intrusive investigations. Personnel located metal scrap on the surface, but none relating to any unexploded ordnance. Numerous subsurface metallic anomalies were detected, with the majority of them near the former target center (with decreasing detection as the team moved away from the center). It was concluded that a potential still exists for subsurface practice bombs (USACE 1998).

4.2 Review of Historic Records

National, Regional and State Records:

National Archives 8th and Pennsylvania Washington, DC 20408 POC: Mitch Yockelson (202) 501-5400

RG 18 Records of the Army Air Forces

Entry 168: Central Decimal Files, 1917-1938; Box 1752 (Hensley AAF); Box 1753 (Hensley AAF); Box 1754 (Hensley AAF).

RG 92 Records of the Office of the Quartermaster General

Entry 1998: Real Estate Records, 1917-1922; Box 626, Dallas to Del Rio (no Dallas NAS); Box 636, Hayes to Houston (no Hensley AAF).

RG 153 Records of the Office of the Judge Advocate General

Entry: Reservation Files, 1800-1950; Box 506, Texas to Zachary Field.

National Archives 8601 Adelphi Rd College Park, MD 20740 POC: Ken Schlessinger (301) 713-6800

RG 18 Records of the Army Air Forces

Entry 2A: Unclassified Decimal File, June 1944-1946; Box 2248 (General Bombing Ranges, no Five Points Field); Box 2271 (had Hensley); Box 2301 (Hensley AAF); Box 2302 (no Hensley or Grand Prairie); Box 2303 (no Hensley or Grand Prairie); Box 2304 (no Hensley or Grand Prairie); Box 2331 (Hensley AAF); Box 2332 (no Hensley or Grand Prairie).

Entry 2C: Unclassified Decimal File, 1947; Box 2812 (Hensley AAF); Box 2813 (Hensley AAF); Box 2814 (Hensley AAF).

Entry 2E: Unclassified Decimal File, 1948; Boxes 3203 & 3204 (no information).

Entry 292: Central Decimal Files, October 1942-May 1944; Box 1515 (no Hensley); Box 1516 (had Hensley).

Entry 295: Correspondence Relating to Airfields, 1939-1942; Box 1372, Cumberland to Deming (Dallas NAS); Box 1738, San Angelo to Miscellaneous; Box 1456, Hartford to Hensley; Box 1457, Hensley Field to Ferry Command; Box 1458, Hensley Field to Higley Field.

RG 71 Records of the Bureau of Yards and Docks

Entry 1001: Naval Property Case Files, 1941-1958; Box 1193, Corpus Christi to Dallas; Box 1194 (Dallas); Box 1195 (Dallas); Box 1196 (Dallas); Box

1197 (Dallas); Box 1198 (Dallas); Box 1199 (Dallas); Box 1200 (Dallas); Box 1201 (Dallas).

RG 72 Records of the Bureau of Aeronautics

Entry 62: General Correspondence, 1943-1945; Box 408 (General Correspondence).

Entry 67: Confidential Correspondence, 1922-1947; Box 288 (General Correspondence); Box 461 (General Correspondence); Box 554 (General Correspondence); Box 655 (General Correspondence).

RG 77 Records of the Office of the Chief of Engineers

Entry 1011: Security Classified Subject Files, 1941-1945; Box 41 (Airfields); Box 474 (Hensley AAF); Box 436 (Grand Prairie); Box 437 (Grand Prairie).

RG 107 Records of the Office of the Secretary of War

Entry 102: General Correspondence Files of Secretary of War, Aviation Fields and Air Bombing Ranges, 1943-1946; Box 128, Ranges F-H (no Five Points nor Hensley).

Entry 211: Establishment of Airfields and Air Bases, 1940-1945; Box 212 (Texas).

RG 159 Records of the Office of the Inspector General

Entry 26D: General Correspondence, 1939-1947; Box 453, Craig to Dallas.

RG 341 Records of Headquarters United States Air Force

Entry 494: Correspondence Relating to Real Estate Facilities, 1948-1955; Box 22 (Texas); Box 32 (Hensley); Box 80 (Texas); Box 81 (Texas); Box 695 (Hensley NAS).

RG 337 Records of Headquarters Army Ground Forces

Entry 55: General Correspondence, 1942-1948; Box 1121 (General Target and Bombing Ranges).

Entry 56: Decimal Correspondence, 1948-1954; Box 763 (no information).

RG 407 Records of the Adjutant General? s Office

Entry: Army AG Classified Decimal Files, 1940-1942; Box 1028 (Flying Fields).

Entry: Army AG Project Decimal File, 1940-1945; Box 4369, Greenville to Hensley Field.

National Archives-Southwest Region 501 West Felix Street Building 1 Fort Worth, TX 76115-3405 POC: Pete Schoals (817) 334-5525

RG 77 Records of the Office of the Chief of Engineers

Entry: Real Estate Acquisition Files, 1935-1954; (no information on Grand Prairie or Dallas NAS).

RG 121 Records of the Public Buildings Service

Entry: Real Property Cases; Box TX 49: Naval Air Station Arlington, Outlying Field (OLF); Box TX 50: Dallas Naval Air Station OLFs, Field Numbers 17611 and 21614.

RG 270 Records of the War Assets Administration

Entry: Real Property Disposal Case Files; Box: Grand Prairie Naval Air Station; Box: Dallas Naval Air Station.

RG 291 Records of the Property Management and Disposal Service

Entry: GSA Disposal Case Files; Box TX 124 (Dallas Naval Air Station).

RG 341 Records of Headquarters United States Air Force

Entry: Construction Program for Air Bases, 1948-1954; Box 4: Connally to Hollaman (had Hensley AAF); Box 31 (Hensley AAF).

Entry: Real Estate Planning Reports, 1943-1954; Box 10: Harlingen to Houston (had Hensley AAF).

Entry: Correspondence and Reports of Visits, 1942-1952; Box 8: Harlingen to Hot Springs (had Hensley AAF).

Air Force Historical Agency HQ AFHRA/ISR Bldg. 1405, Chennault Circle Maxwell AFB, Montgomery, AL POC: Archie Difante (DSN) 493-2447

Corps of Engineers Boxes; Box 13 (Hensley); Box 33 (Dallas); Box 28 (Dallas); Box 49 (Dallas); Box 34 (Hensley); Box 38 (Hensley); Box 43 (Hensley); Box 93 (Dallas NAS); Box 153 (Grand Prairie); Box 184 (Hensley); Box 185 (Hensley).

GP-455-SU, February 1944, 455 Bomb Group (Hensley Field).

Microfilm 00486, Unit/0028/Altitude Training, March 1944 to May 1944.

Decimal 145.91-569, Bombing Ranges.

Decimal 134.45-1, Directory of Army Air Fields, 1940-1945.

Decimal 168.304, Army Air Forces-History, 1940-1943.

Decimal 220.1511-6, AAF Training Command (Gunnery and Bombardment).

Decimal 245.4277, Bombing Ranges.

Decimal 284.2913, Hensley Field.

Decimal 284.30-1A, Hensley Field, 1942-1944.

Decimal 284.30-5, Hensley Field, January 1945-March 1945.

Decimal 525.945, 1943 (Bombing Ranges).

Decimal 527.945, Jan 1945 to June 1946.

Decimal 740.945, September 1942 to June 1943.

Chemical and Biological Defense Command Historical Office AMSCB-CIH Aberdeen Proving Ground POC: Kathy Cioffi

(410) 671-4430

No pertinent information.

U.S. Army Corps of Engineers -Fort Worth District 819 Taylor Street Fort Worth, TX 76115-3405 POC: Randy Niebuhr (817) 978-3223, Ext 1642

Extensive information pertaining to ordnance discoveries at the former range was photocopied.

Texas State Library and Archives Division 1201 Brazos St Austin, TX 78712 POC: Penelope (512) 463-5455

No pertinent information.

Texas Historical Commission 1201 Brazos St. Austin, TX 78712 POC: Brad (512) 475-2166

No pertinent information.

4.3 Summary of Interviews

On 11 January 2000, Tom Murrell and Gregg Kocher conducted an ordnance site visit at the Five Points OLF site. Informal interviews with construction workers at the site were conducted. Workers were able to identify areas where practice bombs had previously been found.

Mr. Barry Osborn of the Fort Worth District provided additional information on the site. When he was a youth in the area (approximately 1974) he hunted on this property. He often picked up old practice bombs (MK 23 Mod 1). Sometimes the practice bombs were unexploded (Osborn 2002).

4.4 Air Photo Interpretation and Map Analysis

4.4.1 General Area Map Analysis

The Five Points OLF site is located south of the city of Arlington in Tarrant County, Texas. The site is approximately two miles south of Interstate 20 and two miles east of US Route 287. Lynn Creek is approximately a half mile north of the site.

4.4.2 Site Specific Map and Drawing Analysis

This archives search located two maps for the former Five Points OLF. Analysis of these maps shows the bombing target in its relative location to the other landing fields. Both maps use the name "Five Points" when describing the target. The paragraphs below discuss the relevant information retrieved from the reviewed maps. The maps are discussed in order of creation or final revision.

Port Hueneme Historical Office

1947 Map of Grand Prairie Airport, USNAS Dallas, Texas, dated 30 June 1947.

An insert on this map of the Grand Prairie Airport shows the relative location of the bombing target and numerous landing fields between Dallas and Fort Worth, Texas. The bombing target is labeled "Five Points" in the insert.

Five Points Field

1956 dated 24 January 1956

This large scale map shows the bombing target with its dimensions and some general topographic descriptions. The coordinates of the target center are also given.

4.4.3 Air Photo Interpretation

Government and contractor personnel conducted an aerial photography database search. The aerial photography retrieved covered the Five Points OLF site during the time period prior to, during and following military use. The imagery acquired is in photographic print format. The analyst performed the interpretation using the following source materials:

Photo. Date	Approx. Scale Sourc	<u>e</u> <u>Fram</u>	<u>e ID #s</u>
18 Dec 50	1:20,000	USDA Archives II	DJY-6G 138-141, 7G 12-16
17 Aug 56	1:20,000	ASCS	DJY-1P 98-100
19 Nov 57	1:20,000	ASCS	DJY-4P 59-61
26 Feb 63	1:20,000	ASCS	DJY-1DD 74-76, 130-132

09 Feb 70	1:20,000	ASCS	DJY-1LL 100-102, 114-116
29 Jan 90	1:40,000	ASCS	NAPP 2324-230, 2322-73

The analyst delineated imagery containing important areas on hard copy plots and digitized it using Computer-Aided Drafting and Design (CADD) software. The digitized features overlay scanned aerial photography, resulting in the final plots (see Plates 2, & 3). The analysis involved using stereo viewing of photography, which allows more accurate identifications over monoscopic interpretations. Resolution and scale of the imagery limited the identification of features discussed in this study. The analyst used the word "probable" when discussing features for which identification is reasonably accurate. The analyst used the term "possible" when identification was not positive, but the object/area matched known features/locations on other sources. Analysis of the aerial photographs referenced the site maps discussed in sections 4.4.1 and 4.4.2 above. Note: Feature description numbers are not necessarily transferable between imagery plates of different years. The sub-paragraphs below describe the relevant features identified on the imagery:

4.4.3.1 1950 Imagery - The 1950 imagery shows the bull's eye target surrounded by agricultural fields. The target consists of two concentric circles with diameters of approximately 200 and 400 feet around a center point. A small wash lies directly east of the target beyond which numerous short linear features are visible. These linear features are probably related to the agricultural uses of the nearby fields. In addition, just west of the target, four rectangular plowed areas overlap in a 3/4 Star of David configuration and are also probably the landing strips. No craters are discernible though some small ground scars are visible in the immediate area of the target.

4.4.3.2 1956, 1957, and 1963 Imagery - The target is still visible on these photos, though it is beginning to fade from view. The surrounding fields are used for agriculture.

4.4.3.5 1970 Imagery - The target is still visible and an unimproved road or trail crosses the site from northeast to the southwest, skirting the target's two concentric circles. South of the target in one of the rectangular fields, seven small buildings are discernible. The buildings are probably related to the agriculture still surrounding the target.

4.4.3.6 1990 Imagery - By 1990, a mobile home park has been built atop part of the bombing target. The trailers are restricted thus far to the eastern half of the target site, but cover the wash as well. Additional residential housing developments are shown approaching the Five Points OLF site from the north, south, and west.

National Archives (Archives II), Cartographic & Architectural Branch 8601 Adelphi Road College Park, MD 20740 POC: Jennifer Nelson or Henry Gwzado (301) 713-7040 The research team also consulted *Aerial Photographs in the National Archives-Special List 25*, dated 1990, for Tarrant County. Using the indexes, the following imagery covers the site and was acquired:

Record Group 145 (Records of the U.S. Agricultural and Stabilization Conservation Service)

18 Dec 50 1:20,000 DJY-6G 138-141, 7G 12-16

The research team also consulted the coverage overlays for the site in Record Group 373 (Records of the U.S. Defense Intelligence Agency) but did not find any imagery at a scale of 1:20,000 or better.

U.S. Department of Agriculture Aerial Photography Field Office 2222 W 2300 S Salt Lake City, Utah 84119-2020 POC: Sharron McGiff (801) 975-3503

The research team reviewed photo-mosaics of available imagery using the county in which the installation is located and acquired the following imagery:

17 Aug 56	1:20,000	DJY-1P 98-100
19 Nov 57	1:20,000	DJY-4P 59-61
26 Feb 63	1:20,000	DJY-1DD 74-76, 130-132
09 Feb 70	1:20,000	DJY-1LL 100-102, 114-116
29 Jan 90	1:40,000	NAPP 2324-230, 2322-73

5.0 REAL ESTATE

5.1 Confirmed DoD Ownership

The U.S. Government acquired 162.06 fee acres in 1940 as an outlying field for the Dallas Naval Air Station (Dallas NAS) at Grand Prairie, Texas. The property was developed and designated Five Points Outlying Field (Five Points OLF). Personnel from the Dallas NAS used Five Points OLF for practice landings and takeoffs. The site was later used as a practice bombing range.

Improvements constructed at the field included a practice landing field, a target bull's-eye consisting of two concentric rings, and a boundary fence. The site is located at the corner of Harris Road and Matlock Road, Arlington, Tarrant County, Texas.

The Navy declared the 162.06 acres of Five Points OLF to be excess at an undetermined date and transferred the property to the General Services Administration (GSA) for disposal. The GSA conveyed all 162.06 acres of the former range to Gordon and Pope Supply Company on 19 July 1956.

There is no record in the real estate files of any restoration or recapture clauses. The GSA deed did recommend that 17.5 acres of the former range be restricted to surface use only and stated that ordnance may be present anywhere on the property. The deed also contained a statement absolving the U.S. Government of all liability, claims, or suits arising from Navy use of the property.

5.2 Potential DoD Ownership

No information indicating DoD ownership of any related lands, other than those mentioned above, was uncovered during the archives search.

5.3 Significant Past Ownership other than DoD

There is nothing in the records to indicate that there were any historically significant past ownerships, other than DoD's, with respect to possible OE contamination.

5.4 Present Ownership

A portion of the site (approximately 35 acres) consists of the Twin Parks Estates mobile home park. The remainder of the 162.06 acres of the Five Points OLF site is currently being developed as a new



6.0 SITE INSPECTION

On 11 January 2000, Tom Murrell and Gregg Kocher of the St. Louis District conducted an ordnance site visit to the former Five Points Outlying Field. Construction workers at the site were able to identify areas where practice bombs had previously been found.

Two miniature Navy practice bombs were inspected and were found to have been expended. Open areas of the site were walked and no additional bombs were found. Construction workers indicated that practice bombs would be uncovered occasionally when they were digging. Much of the area has been re-graded for a new sub-division. No surface indications of ordnance burials were found.

See Appendix I for photographs taken during the site visit.

7.0 EVALUATION OF ORDNANCE PRESENCE

Based on the extensive archives searches performed, the informal interviews conducted with construction personnel on site and observations made during the conduct of the site investigation, explosive ordnance use on this site was limited to MK 23 miniature Navy practice bombs, M38A2 Practice Bombs, and an unknown version of the M47 series Chemical Bomb.

Note: During World War II, M47 chemical bomb casings filled only with sand or water were used as practice bombs when M38A2 Practice Bombs were not available. In addition, M47 series chemical bombs could have been filled with white phosphorous (a smoke producing agent), or powdered rust (a staining agent) to visually mark where the bombs struck the ground when dropped.

As noted in Section 6.0 - Site Investigation, expended miniature Navy practice bombs were the only type of explosive ordnance found during the site investigation.

Photographs of the site are provided at Appendix I.

8.0 TECHNICAL DATA OF ORDNANCE AND EXPLOSIVES

8.1 Ordnance Related Mission

The only known ordnance used on Five Points Outlying Field were MK 23 miniature Navy practice bombs, M38A2 Practice Bombs, and an unknown version of the M47 series Chemical Bomb.

8.2 Description of Ordnance

Technical information on MK 23 miniature Navy practice bombs, M38A2 Practice Bombs, and M47 series Chemical Bomb can be found at Appendix C.

9.0 EVALUATION OF OTHER SITE INFORMATION

The archive search did not reveal	any additional a	areas of potential	environmental	concern	associated
with DoD use of the Five Points O	Outlying Field sit	te.			